NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	**U.S. DEPARTMENT OF COMMERCE** NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) **WFO Jackson, Mississippi**
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH **MAY** YEAR **2002**
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE **Jim Stefkovich, MIC** **In Charge of HSA** DATE **June10th , 2002**

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

The first half of the month was characterized by hot, humid days and mild nights and a few frontal systems moving through the area. From the 4th to the 5th, a slow moving frontal system pushed into the HSA. As the front slowed, heavy rainfall amounts fell in portions of Grenada County. Rainfall amounts reported at Grenada were 4.36 inches in 12 hours. Rainfall amounts elsewhere ranged from less than 1/4 inch to around 1 3/4 inches. Between the 9th to the 11th, a weak cold front pushed into the area and began to dissipate. Rainfall amounts were mostly in the north and central sections of the HSA. Rainfall amount in the north ranged from ½ to 1 3/4 inches. Rainfall over central and southern sections ranged from less than 1/10 of an inch to near ½ inch. On the 13th and 14th, a fast moving cold front brought little if any rainfall to the HSA. The latter half of the month brought with it a period of cooler weather followed by a little more normal rainfall for May. A very strong cold front pushed through the area on the 17th and 18th bringing with it unseasonably cooler air for several days. Rainfall amounts less than 1/10 of an inch to near 3 inches were reported. The heaviest rainfall occurred at Ackerman, MS where 3.06 inches of rain fell and at Kosciusko, MS where 2.05 inches fell.

The most significant rainfall event this month was caused by an approaching upper air low pressure system moving through the area from the 28th until the 31st. The heaviest rainfall occurred over southern sections where drought conditions have prevailed. Rainfall amounts from the 28th to 31st ranged from around 1 inch to almost 4 ½ inches. The highest storm totals for this event were at Hattiesburg, MS (4.46 inches), Purvis, MS (4.28 inches), Union Church, MS (3.68 inches), Brookhaven, MS (3.18 inches), and Shubuta, MS (3.00 inches). Rainfall amounts brought only temporary relief to central and southern Mississippi where rainfall for the past several months has been well below normal.

The most significant hydrologic event occurred along the Mississippi River. Heavy rainfall during early May over the Lower Missouri, the Upper Mississippi and the Lower Ohio Rivers caused very significant rises to occur from Arkansas City to Natchez. By late month, the river began to flood crop land. Farmers had planted crops very close to the river after the river began to recede in April. Significant damage has occurred to crops in backwater areas and those planted within the levee system. Some low lying roads in cities along the river have been inundated.

Soil moisture conditions well below normal prevailed across much of the southern sections until late month. The Weekly Drought Monitor had classified Southern Mississippi in the moderate drought category. Late month rainfall slightly eased conditions in some areas of southern Mississippi. The Weekly Drought Monitor updated conditions to abnormally dry for central and southern Mississippi and northeast Louisiana. Soil moisture remains below normal over southern and central sections of the state and slightly below normal over the northern sections. Soil moisture in Grenada County was at or just above normal. Rainfall over the 4th and 5th brought moderate rises to the Yalobusha, Sunflower, and the Lower Yazoo Rivers. Heavy rainfall over southern sections during the last several days of the month only had a minor impact on rivers over the Lower Pearl and Pascagoula River Systems. See the e-3 Flood Stage Report for river flood crests.

RIVER BASIN	RAINFALL	DEPARTURE FROM NORMS
Southeast Arkansas (Chicot & Ashley counties)	4.00 to 5.50 inches	Just below to near normal.
northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	1.75 to 5.75 inches	Much below normal over southern sections to near normal over northern sections.
Lower Yazoo	1.50 to 5.00 inches	Much Below to just below normal with exception of Grenada County which is above normal.
Big Black	3.00 to 4.00 inches	Much below normal.
Homochitto/ Bayou Pierre	3.00 to 5.50 inches	Below to near normal.
Pearl(abv Jackson)	2.00 to 3.50 inches	Much below normal.
Pearl(Blo Jackson)	1.25 to 4.5 inches	Much below normal to just below normal.
Pascagoula	1.25 to 5.75 inches	Much below normal for northern sections to near normal over southern sections.

The heaviest rainfall amounts in the HSA for the month were 10.76 inches at Grenada, MS; 5.85 inches at Lake Providence, LA; 5.82 inches at Hattiesburg, MS;5.39 inches at Union Church, MS; 5.06 inches at Sondheimer, LA. Some of the lowest reporting rainfall stations were: 1.17 inches at Collinsville, MS; 1.28 inches at Monticello, MS; 1.50 inches at Moorhead, MS; 1.75 inches at Red River Lock #1; 1.95 inches at Forest, MS; 1.97 inches at Hazelhurst, MS; and 1.98 inches at Mize, MS.

Here at the WFO Jackson, the May monthly rainfall was 3.90 inches, which was 0.96 inches below normal. Ending May 31th, we have had 22.57 inches of thus far this year which is 4.18 inches below normal.

The Mississippi River started the month just above normal and ended the month well above seasonal norms from Arkansas City, AR to Natchez, MS. All 4 locations in the HSA were approaching crest by months end. The provisional high and low stages for May are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	40.26	05/31	26.77	05/01
Greenville, MS	51.72	05/30	38.56	05/01
Vicksburg, MS	45.06	05/31	33.78	05/01
Natchez,MS	50.74	05/30	42.27	05/01

Total Flood Warning products issued: 5
Total Flood Statement products issued: 57
Daily Rainfall Products (RRA'S) issued 31
Daily River Forecast Products (RVS'S) issued 31
Daily River Stage products (RVA'S) issued 31

Marty V. Pope
Service Hydrologist

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District.

cc: USGS Little Rock District
USGS Ruston District
USCE Mobile District
USCE Vicksburg District
USCE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
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Southern Region Climate Center
Pat Harrison Waterway District